

FlyCAM API FIGs

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Settings

Serial

<code>void setBaudRate(int)</code>	Set serial baud rate (300 – 230400)
<code>void setParity(int)</code>	Set serial parity mode (0 = no, 1 = odd, 2 = even)
<code>void setInterface(string interface)</code>	Set the serial interface device
<code>void setFlowControl(int)</code>	Set the serial flow control on/off.

Configuration

<code>int readConfig()</code>	Read the config file in the dir set by ConfigLocation
<code>int writeConfig()</code>	Write the current settings to the config file
<code>int setConfigLocation()</code>	Set the path to the config file (0=valid path, 1=invalid path)
<code>int updateConfig()</code>	Immediately writes changes to log and creates a backup

Logging

<code>int setLogType(int)</code>	0: log nothing, 1: log all events, 2: only errors
<code>int setLogLocation(string path)</code>	Set the path to the logs dir (0=valid path, 1=invalid path)

FlyWheel

Montioring

float getVelocity()	Gets the velocity from the microcontroller
float getAcceleration()	Gets the acceleration from the microcontroller
float getJerk()	Gets the jerk from the microcontroller
float getDisplacementX()	Gets the X displacement from the microcontroller
float getDisplacementY()	Gets the Y displacement from the microcontroller
float getCurrent()	Gets the current being created/used by the flywheel
float getVoltage()	Gets the voltage being created/used by the flywheel
float getWattage()	Gets the wattage being created/used by the flywheel
float getPowerFactor()	Gets the Power Factor of the flywheel

Control

void setVelocity(float)	Sets the Velocity of the Flywheel
void setAcceleration(float)	Sets the Acceleration of the Flywheel
void setJerk(float)	Sets the Jerk of the Flywheel
void setCorrectionX(float cor)	Adds/subtract cor from the current X displacement
void setCorrectionY(float cor)	Adds/subtract cor from the current Y displacement

Logging

Reading

<code>string getRecent()</code>	Get the most recent line from the logs
<code>String getLine(int num)</code>	Get log text at line number
<code>String getLog()</code>	Get the entire log
<code>String getRange(int time_begin, int time_end)</code>	Get the logs between time_begin and end

Writing

<code>int writeLine(string log_text)</code>	Add a line to the logs. Appends the date & time
<code>Int writeError(int error code)</code>	Write a predetermined error code